GIRFT, BASK and BOA Best Practice for Knee Arthroplasty Surgery Documentation

Background and Justification:

This guidance has been produced by the Getting It Right First Time (GIRFT) programme in partnership with the British Association for Surgery of the Knee and is aimed to provide advice on various aspects of surgery which should be available and clearly documented in a knee arthroplasty operation record. The document is not a comprehensive guide to knee surgery, however it is hoped that surgeons will find the advice it offers helpful.

It is expected that the standards listed would be included within the documentation of patient care and although the majority will be included in the operation note, the information could be contained elsewhere in the patient record including and not limited to pre-surgery documentation from outpatient and pre-assessment clinics, MDT meeting documentation, ward round entries, a separate WHO Surgical Safety Checklist and drug charts. The documentation where appropriate may be made by other members of the surgical team apart from the operating surgeon. However, it is the operating surgeon's responsibility to ensure that appropriate documentation has occurred.

It is important to note that the information in this document was produced from the analysis of medical negligence claims notified to NHS Resolution by NHS trusts, the experience of leading expert witnesses in orthopaedic surgery and a review of existing guidance. The complete document including case studies should be read in parallel with this summary.

Standards for documentation of practice in all patients undergoing knee arthroplasty surgery:

1. If used, record the results of pre-operative templating and the outcomes of any MDT meetings used to discuss complex cases including who was present and the agreed actions.
2. Documentation of the informed consent process should be available, including the choice of implants, the potential use of bone graft or any other additional procedures as relevant.
3. Safety briefing, sign in, time out, and sign out as part of WHO Surgical Safety Checklist . Presence of required prostheses and any equipment required for their insertion should be confirmed .
4. Record names of all surgeons with name/grade of lead surgeon and assistants.
5. Record names and grade of anaesthetist(s) and type(s) of anaesthetic used.
6. Note use of tourniquet, including protective steps to prevent spirit burns, time and pressure.
7. Record pre-operative range of movement, deformity, skin and vascular condition.
8. Record patient position and skin preparation.
9. Record surgical approach, including steps taken to protect critical structures and sequence of releases.
10. Document the degree of chondral surface wear in all 3 compartments and status of cruciate ligaments.
11. Preparation of femur, tibia, and patella including referencing technique, intra/extramedullary jigs, rotational alignment, tibial slope, cutting block sizes, use of stems or augments and remaining bone stock.
12. Record the trialling of implants and sizes, including any reason for accepting tibial/femoral overhang in the anteroposterior or lateral position and justification for using uncommon component sizes.
13. Record assessment of soft tissue balancing with techniques used to achieve equal flexion/extension gaps.
14. Record the implanted prosthesis type, design, style or material, size and laterality where appropriate. The manufacturer's unique identifier label for the prosthesis should be attached for all components, and uploaded to the National Joint Registry.
15. It is preferable to use implants that manufacturers identify as compatible. A justification should be documented if ignoring manufacturer's guidance, e.g. in revision surgery.
16. Record the type of cement used e.g. brand, use of antibiotics, quantity, and methods used to optimise cementation. The manufacturer's label for the cement detailing the batch number should also be attached.
17. For the second procedure of bilateral knee arthroplasty, knowledge of the previous implants and sizes is required, and any reason for deviation from these should be documented.
18. Prior to closure, document assessment of extensor mechanism and collateral ligament integrity, total range of movement, stability including during mid-flexion, flexion/extension gaps, patella tracking and component alignment.
19. Record details of complications e.g. fracture, and management.
20. Record details of closure and use of drains.
21. Record drugs given during surgery e.g. antibiotics, tranexamic acid.
22. Record vascular status at end of procedure, and neurologic status once regional anaesthesia has worn off.
23. The post-operative plan for antibiotics, haemoglobin, AP and Lateral X-rays, and VTE thromboprophylaxis (including risk assessment and deviations from local protocol) should be documented.
24. Clear instructions should be given regarding post-operative mobilisation strategy and any concerns or deviation from standard practice should be identified.

EVIDENCE BASE:

[1] *WHO Surgical safety checklist, http://www.who.int/patientsafety/safesurgery/ss_checklist/en/*

[2] *National safety standards for invasive procedures, https://improvement.nhs.uk/resources/national-safety-standards-invasive-procedures/*